

In the Claims

Kindly amend claims 1, 6, 29 and 30.

1. (Currently amended) An article comprising diamond directly deposited on a non-metallic framework material substrate having a porosity sufficient to permit the flow of fluids in at least one direction through the material.

2. (Original) The article of claim 1 wherein said framework material substrate comprises a material compatible with a diamond deposition process.

3. (Original) The article of claim 1 wherein said framework material substrate comprises a material incompatible with a diamond deposition process coated with a material compatible with a diamond deposition process.

4. (Original) The article of claim 1 wherein said diamond has a thickness of at least about 2 microns.

5. (Canceled)

6. (Currently amended) An article comprising diamond deposited directly on a non-metallic open-cell foam substrate having a porosity sufficient to permit the flow of fluids in at least one direction through the material.

7. (Original) The article of claim 6 wherein said framework material substrate comprises a material compatible with a diamond deposition process.

8. (Original) The article of claim 6 wherein said framework material substrate comprises a material incompatible with a diamond deposition process coated with a material compatible with a diamond deposition process.

9. (Original) The article of claim 6 wherein said diamond has a thickness of at least about 2 microns.

10. (Canceled)

11. (Original) The article of claim 6 wherein said article has a porosity of at least 100 voids/inch.

Claims 12 through 27 (Withdrawn)

28. (Previously Amended) An article comprising:
a non-metallic reticulated unitary structure;
an interlayer coated on said non-metallic reticulated unitary structure;

a diamond layer deposited on said interlayer configured to form a contiguous open structure configured for fluid flow in more than one axis through said contiguous open structure, wherein said diamond is fully coalesced.

29. (Currently amended) An article comprising diamond directly deposited on a non-metallic framework material substrate having a porosity sufficient to permit the flow of fluids in at least one direction through the material, wherein said diamond is fully coalesced.

30. (Currently amended) An article comprising diamond directly deposited on a non-metallic open-cell foam substrate having a porosity sufficient to permit the flow of fluids in at least one direction through the material, wherein said diamond is fully coalesced.